

**THE U.S. DEPARTMENT OF ENERGY**  
**OFFICE OF ENERGY EFFICIENCY AND**  
**RENEWABLE ENERGY'S**

**NATIONAL ALTERNATIVE**  
**FUELS HOTLINE**

**NATURAL GAS RESOURCE**  
**GUIDE**

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**FOR ADDITIONAL INFORMATION CONTACT THE HOTLINE**  
**800-423-1DOE • 703-528-3500**  
**FAX: 703-528-1953**  
**E-MAIL: [hotline@afdc.nrel.gov](mailto:hotline@afdc.nrel.gov)**

## TABLE OF CONTENTS

<b>I.</b>	Adsorbed Natural Gas Contacts
<b>II.</b>	Associations
<b>III.</b>	Databases
<b>IV.</b>	Directories
<b>V.</b>	Funding and Incentives
<b>VI.</b>	Government Contacts
<b>VII.</b>	Periodicals
<b>VIII.</b>	Safety Standards
<b>IX.</b>	Tank Manufacturing and Testing Standards
<b>X.</b>	Vehicle Manufacturer Contacts

### I. ADSORBED NATURAL GAS

#### **James Wegerzin (pron: Waygerson)**

Department of Applied Science  
Brookhaven National Laboratory  
Building 801M, Upton, NY 11973

**Phone:** 516-282-7917

**Fax:** 516-282-5526

#### **Doug Horne**

Director for Research & Development  
Atlanta Gas Light Adsorbent Research Group  
235 Peach Tree Street, N.E.  
P.O. Box 4569, Atlanta, GA 30302

**Phone:** 404-584-4802

**Fax:** 404-584-4807

#### **Terry Cook**

Program Manager  
Atlanta Gas Light Absorbent Research Group  
235 Peach Tree Street, N.E.  
P.O. Box 4569, Atlanta, GA 30302

**Phone:** 404-584-4806

**Fax:** 404-584-4807

#### **Michael Gurevich**

Program Manager  
U.S. Department of Energy  
1000 Independence Ave, S.W.  
Washington, DC 20585

**Phone:** 202-586-6104

**Fax:** 202-586-9815

### II. ASSOCIATIONS

#### **Canadian Gas Association**

243 Consumers Rd, Suite 1200  
North York, ON CANADA M2J5E3

**Contact:** Ed Cartright, Community Relations  
Barbara Cayley, Librarian

**Phone:** 416-498-1994

**Fax:** 416-498-7465

The CGA focus is to develop the Canadian market for NGVs. The association provides a forum for discussion with government agencies with an interest in the NGV market.

### Canadian Gas Research Institute

55 Scarsdale Road, Don Mills

ON, CANADA M3B2R3

**Contact:** Drive Shahrazad Rahbar, Engineer

**Phone:** 416-447-6661

**Fax:** 416-447-6757

### Compressed Gas Association

Crystal Square 2, 1725 Jefferson Davis Highway  
Suite 1004, Arlington, VA 22202-4102

**Contact:** Carl T. Johnson, President

**Phone:** 703-412-0900 ext. 712

**Toll Free:** 800-U-ASK-CGA

**Fax:** 703-412-0128

Provides technical information and safety standards for storage, transportation and distribution of natural gas.

### Gas Research Institute

8600 Bryn Mawr Avenue, Chicago, IL 60631

**Contact:** Rajeeana Gable, Group Manager

**Phone:** 312-399-8321

**Fax:** 312-399-8170

Research and development management organization for the natural gas industry. GRI's work includes developing advanced, cost-effective natural gas engines and vehicles, as well as enabling technology such as on-board storage and refueling equipment. GRI's objective is to increase the value of gas energy service to the industry and its customers.

### Institute of Gas Technology

4201 West 36th Street, Chicago, IL 60632

**Contact:** Christopher Blazek, President

**Phone:** 312-890-6400

**Fax:** 312-890-6460

Provides research, development, demonstration projects and consulting to the NGV industry and government. This includes CNG and

LNG vehicle systems, refueling stations, storage, economics, data collection, and marketing research.

### Natural Gas Vehicle Coalition

1515 Wilson Boulevard, Arlington, VA 22209

**Contact:** Rich Kolodziej, President

**Phone:** 703-527-3022

**Fax:** 703-527-3025

The Natural Gas Vehicle Coalition is a national trade association committed to developing profitable, long-term markets for natural gas vehicles. Member organizations include natural gas distribution companies, pipelines, producers, NGV equipment suppliers, non-profit organizations and governmental agencies.

### Natural Gas Vehicle Producers Association

113 South West Street, 4th Floor

Alexandria, VA 22314

**Contact:** Wayne Smith, Managing Director

**Phone:** 703-838-2941

**Fax:** 703-838-2950

### Society of Automotive Engineers (SAE)

400 Commonwealth Drive

Warrendale, PA 15095-0001

**Contact:** David DuBois, Staff Engineer

**Phone:** 412-772-7159

**Fax:** 412-776-0243

Organization of professional engineers who establish standards for the automotive industry. Publishes technical studies and is a clearinghouse for technical resources.

## III. DATABASES

### Alternative Fuels Data Center

P.O. Box 12316

Arlington, VA 22209

**Contact:** National Alternative Fuels Hotline

**Phone:** 800-423-1363

**Fax:** 703-528-1953

**E-Mail:** hotline@afdc.nrel.gov  
**Internet:** www.afdc.doe.gov

Accessible via the World Wide Web, the AFDC has information including lists of refueling sites and vehicle emissions data on the various alternative fuels.

**Natural Gas Vehicle Safety Data Base**  
 Science Applications International Corp.  
 1710 Goodridge Drive, T-2-7-2  
 McLean, VA 22102

**Contact:** David M. Friedman  
**Phone:** 703-821-4559  
**Fax:** 703-893-2187

**Motor Fuels Information Center**  
 Information Resources, Inc.  
 1925 North Lynn Street, Suite 1000  
 Arlington, VA 22209

**Contact:** David Holt, Director, Legislative & Regulatory Affairs  
**Phone:** 703-528-2500  
**Fax:** 703-528-1603  
**E-Mail:** david.holt@motorfuels.com  
**Internet:** www.motorfuels.com

Accessible via the World Wide Web, MFIC is a comprehensive database on motor fuels. MFIC contains complete listings of state and federal legislation as well as up-to-date information on alternate fuels. This is a paid subscription service.

## IV. DIRECTORIES

**NGV Resource Guide**  
 RP Publishing, Inc.  
 1410 Grant Street, Suite B203  
 Denver, CO 80203-9784  
**Contact:** Ellen Pollock, Editor  
**Phone:** 303-863-0521  
**Fax:** 303-863-1722

The NGV Resource Guide is an annual directory containing lists of suppliers, manufacturers and

service providers to the natural gas vehicle industry. This publication also includes maps and an overview of current alternative fuel legislation, as well as market forecasts and economic trends.

## V. FUNDING/INCENTIVES

### FEDERAL TAX CREDITS/DEDUCTIONS

Title 19 of The Energy Policy Act of 1992 (EPACT) outlines tax deductions for qualified alternative fuel vehicles. Deductions are broken down by weight and types of vehicles, and are as follows:

Truck or van (GVW 10,000 - 26,000 lb.):	
\$5,000	
Truck or van (GVW more than 26,000 lb.):	
\$50,000	
Buses (seating capacity of 20+):	\$50,000
All other vehicles:	\$2,000
*	
*(Off-road vehicles, e.g. forklifts, not included)	

The tax credit for qualified electric vehicles is 10% of the cost of the vehicles or \$4,000, whichever is lower.

These amounts shall be reduced according to the following schedule:

2002: 25% reduction; 2003: 50% reduction; and 2004: 75% reduction. These deductions and credits are available after 12/20/93 through 12/31/04 (2004).

Tax deductions for qualified clean-fuel vehicle refueling properties shall not exceed \$100,000 for property placed in service by the taxpayer in the taxable year or preceding taxable years. Deductions are available from 6/30/93 through 12/31/04.

**Internal Revenue Service**  
 1111 Constitution Ave, NW  
 Washington, DC 20224

**Contact:** Winston Douglas,  
Alternative Fuels Tax Provisions  
**Phone:** 202-622-3110  
**Order Desk:** 800-829-3676

(ask for Pub #535, *Alternative Fuel Vehicle Tax Deduction Booklet*)

## STATE AND FEDERAL PROGRAMS

For information on state programs, contact your State Energy Office. Phone numbers and contacts for these offices are provided in *The Guide to Alternative Fuel Vehicle Incentives and Laws*, available through the National Alternative Fuels Hotline (See page 2). This guide summarizes federal and state laws, regulations and incentives.

## UTILITY INCENTIVES

### Natural Gas Vehicle Coalition

1515 Wilson Boulevard, Arlington, VA 22209

**Contact:** Rich Kolodziej, President

**Phone:** 703-527-3022

**Fax:** 703-527-3025

The Natural Gas Vehicle Coalition is a national Trade association committed to developing profitable, long-term markets for natural gas vehicles. Member organizations include natural gas distribution companies, pipelines, producers, NGV equipment suppliers, non-profit organizations and governmental agencies.

## VEHICLE CREDITS AND CREDIT TRADING

Section 508, Title V of EPACT provides credits for fleet owners who purchase AFVs earlier or in greater quantities than required in the act. One credit is obtained for each AFV that a fleet owner purchases beyond the requirements. The credits are transferable and there are no restrictions on where the credits can be traded. DOE is working to

develop a credit trading database. For further information, contact the National Alternative Fuels Hotline.

## VI. GOVERNMENT CONTACTS

### National Renewable Energy Laboratory

1617 Cole Boulevard, Golden, CO 80401-3393

**Contact:** Paul Norton, Project Engineer

**Phone:** 303-275-4424

**Fax:** 303-275-4415

**E-Mail:** nortonp@tcplink.nrel.gov

**Internet:** www.afdc.doe.gov

### U.S. Department of Energy

#### Office of Heavy Vehicle Technologies

1000 Independence Ave, S.W.

Washington, DC 20585-0121

**Contact:** Richard Wares,  
Transit Bus Program Manager

**Phone:** 202-586-8031

**Fax:** 202-586-9815

### U.S. Environmental Protection Agency

#### National Vehicle & Fuel Emissions Laboratory

2565 Plymouth Rd, Ann Arbor, MI 48105

**Contact:** John Mueller, Propane/CNG/LNG

**Phone:** 313-668-4275

**Fax:** 313-741-7816

## VII. PERIODICALS

### Clean Fuel Vehicle Week

Energy West Publishers

1709 Salvador Ave, San Clemente, CA 92672

**Phone:** 714-492-1340

**Fax:** 714-492-6556

**Frequency:** Weekly

**Subscription:** \$445/year, \$625/year

Available by mail or fax, Clean Fuel Vehicle Week provides information on vehicles fueled by natural gas and other alternative and new fuels.

### Energy Information Administration (EIA)

National Energy Information Center  
Washington, DC 20585

**Phone:** 202-586-8800

**Fax:** 202-586-1076

**E-Mail:** infoctr@eia.doe.gov

Offers a listing of documents published by EIA and its various offices such as the National Technical Information Service (NTIS) and the National Energy Information Center (NEIC). This is a valuable source for energy statistics.

### LNG Express

Zeus Development Corporation  
2424 Wilcrest Drive, Suite 240, P.O. Box 272505  
Houston, TX 77277-2500

**Contact:** Dan McKay, Editor

**Phone:** 713-952-9500

**Fax:** 713-952-9526

**Frequency:** Bi-monthly

**Subscription:** \$225/year

Reports on current activities relating to liquefied natural gas (LNG).

### Natural Gas Fuels

RP Publishing, Inc. 1410 Grant Street, Suite B203  
Denver, CO 80203-9784

**Contact:** Ellen Pollock, Editor

**Phone:** 303-863-0521

**Fax:** 303-863-1772

**Frequency:** Monthly

**Subscription:** Free

A magazine dedicated to the use of natural gas as a vehicle fuel, *Natural Gas Fuels* is written especially for fleet owners, local distribution companies, manufacturers and suppliers of NGV equipment and services.

### Natural Gas Vehicle

American Gas Association  
1515 Wilson Boulevard, Arlington, VA 22209

**Phone:** 703-841-8400

**Fax:** 703-841-8689

**Frequency:** Bi-monthly

**Subscription:** \$192/year for non-members

### NGV News

Pasha Publications  
1616 North Fort Myer Drive, Suite 1000  
Arlington, VA 22209

**Phone:** 800-424-2908

**Frequency:** Monthly

**Subscription:** \$247/year

### New Fuels Report

Inside Washington Publishers  
Ben Franklin Station, P.O. Box 7167  
Washington, DC 20044

**Phone:** 800-424-9068

**Local:** 703-416-8500

**Fax:** 703-416-8543

**Frequency:** Weekly

Reports worldwide on oxygenates, alcohols and other alternative fuels.

## VIII. SAFETY STANDARDS

### National Fire Protection Association

**Contact:** Ted LeMoff, Senior Gases Engineer

**Phone:** 617-770-3000 x3434

**Order Desk:** 800-344-3555

The NFPA provides safety standards for natural gas storage, handling, and transportation. The following standards apply to natural gas.

**NFPA 52:** *Compressed Natural Gas Vehicular Fueling Systems: A Guide to the Design and Installation of CNG Fuel Systems*

**NFPA 57:** *Liquefied Natural Gas Vehicular Fuel Systems*

**NFPA 170:** *Fire Safety Symbols*

### **Compressed Gas Association**

Crystal Square 2, 1725 Jefferson Davis Highway  
Suite 1004, Arlington, VA 22202-4102

**Contact:** Carl T. Johnson, President

**Phone:** 703-412-0900 ext. 712

**Toll Free:** 800-U-ASK-CGA

**Fax:** 703-412-0128

Provides technical information and safety standards for storage, transportation and distribution of natural gas.

## **IX. TANK MANUFACTURING & TESTING STANDARDS**

Compressed natural gas fuel tanks must be manufactured under the following three types of standards:

### **U.S. Department of Transportation:**

Standard #304: Federal standards for CNG storage tanks are contained in the final rule for CNG Fuel Container Integrity—Federal Register 49 CFR Part 571.

### **American National Standards**

#### **Institute/American Gas Association NGV2:**

NGV2 standards are available through the Natural Gas Vehicle Coalition. Tanks manufactured under NGV2 standards surpass NHTSA certification standards.

### **American Society of Mechanical Engineers:**

Tanks that are built under ASME Code have a very high safety record. ASME Code requirements result in a much heavier tank, and are used primarily in heavy vehicles.

### **Testing Standards**

The following are the current guidelines for testing natural gas fuel containers:

### **ANSI/AGA/NGV-2: Visual Inspection Standards for NGV Fuel Containers:**

Sets visual inspection procedures and standards for fuel containers.

**Contact:** Bob DeReamer, Project Engineer

**Phone:** 216-524-4990

### **CGA C-6.4 Visual Inspection Guide**

Describes visual inspection of NGV cylinders.

**Contact:** Compressed Gas Association

**Phone:** 703-412-0900 ext. 712

### **ASTM E0704/95-1**

Acoustic method for on-board testing of NGV cylinders.

**Contact:** Jim Mitchell,

Director of Market Development

**Phone:** 860-536-3380

**Fax:** 860-536-3380

### **National Highway Traffic Safety Administration**

U.S. Department of Transportation

**Contact:** Gary Woodford, Group Leader for Rollover and Adapted Vehicles Group

**Phone:** 202-366-4931

**Fax:** 202-493-2739

### **Gas Research Institute**

8600 West Bryr Mawr Avenue  
Chicago, IL 60631

**Contact:** Steve Takagishi, Program Manager

**Phone:** 312-399-8215

**Fax:** 312-399-8369

### **Modern Engineering**

15201 Commerce Drive, North,  
Dearborn, MI 48121

**Contact:** Robert Childs, Program Manager

**Phone:** 313-317-9675  
**Fax:** 313-336-7104

**Phone:** Alternative Fuels Division  
 313-556-7723

## Composite Tanks

Composite tanks are molded fiberglass lined with carbon. These tanks are extremely lightweight (one quarter the weight of an aluminum tank), and can be molded into any shape to take up excess space. These tanks are currently available for purchase. For more information, please contact the Natural Gas Vehicle Coalition (See page 2).

## X. VEHICLE MANUFACTURER CONTACTS

### American Honda

1919 Torrance Boulevard, Torrance, CA 90501

**Contact:** Steve Ellis, Manager,  
Alternative Fuels Task Force

**Phone:** 310-783-3987

**Fax:** 310-781-4585

**E-Mail:** sellis@amerhonda.com

### Chrysler Corporation

27777 Franklin Road, Southfield, MI 48034

**Contact:** Michael Clement, Manager,  
Alternative Fuel Vehicle Sales

**Phone:** 810-576-5472

**Toll Free:** 800-255-2616

### Ford Motor Company

World Headquarters, The American Road,  
Room 255, Dearborn, MI 48121-1899

**Contact:** Tom Artushin, Manager  
Ford Alternative Fuel Division

**Phone:** 313-446-9461

**Toll Free:** 800-ALT-FUEL

### General Motors Corporation

3044 West Grand Boulevard, Detroit, MI 48202

**Contact:** Gerald Barnes, Manager,